

NOTES ON HESPERIIDAE AND LYCAENIDAE (LEPIDOPTERA) FROM SOUTH-EASTERN QUEENSLAND

By Murdoch De Baar,
25 Irwin Terrace, Oxley, Brisbane, 4075.

This paper reports on specimens which extend the known distributions of some species of HesperIIDae and Lycaenidae in south-eastern Queensland.

The known ranges (Common and Waterhouse, 1972) of *Hypochrysops epicurus* Miskin and *Toxidia rietmanni rietmanni* (Semper) are extended northwards from Brisbane to the Maryborough and Central Burnett district respectively and of *Toxidia thyrrhus* Mabille southwards from Yeppoon to the Central Burnett district. Collection records of interest are presented for *Pseudidipsas illidgei* Waterhouse and Lyell, and *Hypochrysops cyane* (Waterhouse and Lyell).

All specimens referred to in this paper are in author's collection.

Family HESPERIIDAE

Toxidia thyrrhus Mabille

One male was collected and two positively observed on 12th December, 1974, at Jimmy's Scrub State Forest located 20 km north of Manumbar.

This species has not previously been recorded south of Yeppoon.

Toxidia rietmanni rietmanni (Semper)

Several were collected in November, 1972, at Archookoora State Forest located 15 km east of Kumbia. Five were also collected and many observed during the period from 12th December, 1974, to 14th January, 1975, at Jimmy's Scrub State Forest.

This species has not been previously recorded north of Brisbane and this material extends its range into the Central Burnett district.

Family LYCAENIDAE

Hypochrysops epicurus Miskin

Three females were collected and several observed on 24th April and 8th May, 1973, at Saltwater Creek, Maryborough; all settled on, or flying around mangroves. One male was taken in April, 1973, along the Mary River at Maryborough.

This species has not previously been recorded north of Brisbane.

Hypochrysops cyane (Waterhouse and Lyell)

One male was collected on 21st October, 1973, settled on ironbark leaves on a hilltop site in the Bunya Mountains.

This record is of interest since the species is regarded as rare throughout its range (Macqueen, 1965).

Pseudodipsas illidgei Waterhouse and Lyell

One female was collected on 16th September, 1973, at Hay's Inlet area in a northern part of Brisbane. Smales and Ledward (1942) recorded the last collection of this species. The specimen was flying from mangroves into open-forest country when collected.

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References

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NOTES ON THE BEHAVIOUR OF THE ROBBER FLY *PROMACHUS INTERPONENS* WALKER (DIPTERA: ASILIDAE)

By G. Daniels,

98 Harris Street, Fairfield, N.S.W. 2165.

Abstract

At Iron Range, Claudie River district, north Queensland, adult male *Promachus interponens* Walker were seen to hover in the vicinity of females, a behaviour previously unrecorded for Australian Asilidae. Observations showed that hovering was one of the components of courtship behaviour.

Introduction

The genus *Promachus* Loew is a widely distributed and numerous group of large robber flies. They occur in most regions of the world, but in Australia are recorded only from eastern states. The most recent comprehensive work on Australian species is that of Ricardo (1913), recording six species. *Promachus* is distinguished from other Australian genera of Asilini, by the presence of three submarginal wing cells and distinctive genitalia, males having a three-pronged aedeagus and females with an elongated ovipositor.

P. interponens is a large, dark brown and black asilid, 23-26 mm in length, distributed from the Molucca Islands to north-eastern Australia. Males have distinct shining silver-white hairs on the dorsal and anterior surfaces of the tibiae, the mid tibiae having the densest covering. Females lack these silver-white hairs, but have similar body colouration.

Courtship behaviour has rarely been observed in this family of flies. Lavigne and Holland (1969) reported the courtship hovering of *Heteropogon wilcoxi* James, *Cyrtopogon willistoni* Curran, *Stichopogon trifasciatus* (Say), *Diogmites angustipennis* Loew and *Promachus dimidiatus* Curran, from America, and summarised other records of courtship hovering in asilids. Lavigne (1970) also reports the courtship hovering of *Heteropogon maculinervis* James. No information on habits or biology of the genus has been recorded for Australian species.

Capture of prey

During 1974, adults of *P. interponens* began to appear in early September at Iron Range, Claudie River district, north Queensland. By November it was by far the most numerous asilid, appearing most frequently in rainforest clearings, less often on the edge of the rainforest and was seen only once in open *Melaleuca* country. Adults were seen to